PHILADELPHIA MEDICAL TIMES.

SATURDAY, DECEMBER 27, 1873.

ORIGINAL COMMUNICATIONS.

NATIVITY OF PARENTS AS AFFECTING THE FECUNDITY, AND THE PROPORTION OF SEXES IN BIRTHS IN GENERAL, AND IN THE TWIN, ILLEGITIMATE, AND STILL-BIRTHS IN PARTICULAR,

AS ILLUSTRATED IN THE VITAL STATISTICS OF THE STATE OF MICHIGAN FOR THE YEAR 1870.

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THE writer in the course of his statistical studies, in seeking facts to support theories, elaborated from the "Fourth Annual Report (1870) of Births, Marriages, and Deaths occurring in the State of Michigan" (so excellently compiled by Dr. Henry B. Baker), a table exhibiting the effect of native, foreign, and mixed matrimonial alliances upon the proportion of sexes in the births from such unions; particularly the proportion among twin, illegitimate, and still-births.

In this table it will be seen that foreign parents have a larger proportion of male offspring, indicating that they are more prolific than native couples. And when the mother only is foreign, the proportion of males is still further increased; while native mothers with foreign fathers produce the smallest proportion of any.

The object of this paper is twofold: first, to point out these facts, and, in the second place, to explain the proximate cause of these differences.

*Births in the State of Michigan for the Year 1870.**

NATIVITY OF PARENTS.	TOTAL BIRTHS.†			TWINS.‡	ILLEGITIMATE.§	STILL-BIRTHS.‖	
	MALES.	FEMALES.	BOYS TO 100 GIRLS.	BOYS TO 100 GIRLS.	BOYS TO 100 GIRLS.	BOYS TO 100 GIRLS.	PER CENT. OF TOTAL.
Mothers { Native	699	625	104.18	93.70	107.00	200.00	14.86
Mothers { Foreign	1,144	1,098	111.17	171.42	95.00	150.00	6.75
Fathers { Native	1,144	1,098	111.17	171.42	135.00	150.00	6.75
Fathers { Foreign	699	625	104.18	93.70	45.00	200.00	14.86
Both Parents Native	6,463	5,904	107.77	96.00		127.27	
" " Foreign	4,483	4,101	109.31	103.84		320.00	
Same American or Foreign State						135.71	
Different " " "						450.00	
Total all Nativities¶	13,846	12,726	108.80	107.00	108.10	162.50	

In general, native mothers with foreign fathers produced 104.18 males to every 100 females, which is a smaller proportion of boys than where both parents are native (107.77 male to 100 female); while foreign mothers with native fathers produced 111.17 males to every 100 females, which is a *larger* proportion of males than where both parents are foreign,—viz., 109.31 males to 100 females. Where both parents are foreign, the proportion is 109.31 males to 100 females, while native parents produced only 107.77 males to 100 females, indicating, according to the law already enunciated by the writer, that under ordinary circumstances the greater the proportion of males in births the greater the fecundity.**

The fact of foreign fathers reducing the proportion of males (increasing the proportion of females) below the average, where both parents are foreign, and *even lower than where both parents are native*, is a significant one, which cannot help arresting our attention, and is worthy of careful consideration, pointing as it surely does to a *differential dynamic relationship*†† between the parental combinations.

As foreign parents produce a larger proportion of males than native parents, by our ordinary methods of reasoning we would naturally infer that a native

*Fourth Annual Report of Secretary of State (Hon. Daniel Striker) of the State of Michigan, relating to the Births, Marriages, and Deaths for the Year 1870. Lansing. Compiled by H. B. Baker, M.D.

† *Ibid.*, p. 43.

‡ *Ibid.*, pp. 52–3.

§ *Ibid.*, p. 67.

‖ *Ibid.*, pp. 63–4.

¶ While it cannot be denied that the number of births in any or indeed in all of these classes is insufficient to warrant us in fixing limits to the proportions in the various differentiations, we do claim that the deductions are in the main well founded, as the figures are called into play merely for the sake of illustrating, and thus corroborating, theories deduced from other sources.

** The Relative Viability of the Sexes; particularly with Regard to the Relative Liability of the Inheritance of Certain Transmissible Diseases, etc., etc. New York Medical Record, June 16 and July 15, 1873, pp. 9.

†† This theory of a differential dynamic relationship was first maintained in an inaugural dissertation (presented to the Trustees and Faculty of the Medical Department of the University of Pennsylvania for the degree of Doctor of Medicine, March 13, 1868), entitled "Prepotency, Sexual Elective Affinity, Non-Congeniality, or the Dynamic Differentiation of the Elements of Reproduction in the Human Species; the Cause of Relative Sterility," by John Stockton-Hough, M.A., M. Chem., of New Jersey; also in the article on Relative Viability, etc., above referred to, and in a paper on "Statistics relating to the Births, Marriages, and Deaths occurring in Philadelphia for the Eleven Years ending 1871,"—Penn Monthly, Philadelphia, September, 1873, pp. 599–620, and Proceedings of the Social Science Association of Philadelphia, September, 1873; also in a paper "On the Temperature of the Sexes—an Indication of Development,"—Philadelphia Medical Times, November 8, 1873, pp. 3; also in a forthcoming work on "The Proximate Cause of Evolution;" also in a paper on "The Cause of Rotation and Nearly Equal Number of Sexes in Births;" also in a paper "On a Certain Anomalous Condition of the Flowers of Zea Mays, as an Indication of the Relative Development of the Male and Female Plants,"—American Naturalist, January, 1874; also in a paper on "The Laws of Transmission of Resemblance from Parents to their Children,"—New York Medical Record, August 15, Part I.; September 15, Part II.; October 15, Part III.; November 15, Part IV., 1873, pp. 16.

coupled with a foreigner ought to produce a proportion of males between these two; but this is not the case, as we have shown, whether we couple the native man with the foreign woman, or the reverse. In the first instance the proportion of males is increased, while in the second instance it reduces it below the smaller proportion; in neither case, therefore, does it fall between the proportion where both are native or both foreign. This fact is a practical proof of the existence of the differential dynamic relationship between the elements of reproduction for which we contend in our theory.

From these figures it would appear that the foreign father has more power to diminish the proportion of males (109.31 — 104.18 = 5.13) than the foreign mother has to increase it (111.17 — 109.31 = 1.95) beyond that where both parents are foreign (109.31); while the native mother diminishes the proportion (107.77 — 104.18 = 3.59) more than the native father (foreign mother) increases it (111.17 — 107.77 = 3.40) beyond that where both are native (107.77).

TWIN BIRTHS.

By reference to the table we see that foreign mothers with native fathers had 171.42 males to 100 females in their twin births, while native mothers with foreign fathers had but 93.70 males to 100 females. Where both parents were native, the proportion was 96 males to 100 females, while both parents foreign gave 103.84 males to 100 females; thus following the same law with relation to the proportions in each combination as in the births in general.

In Rhode Island, in the nineteen years ending 1871, there were 853 plurality births, of which both parents were American in 44.5 per cent. (380) of the cases, foreign in 47.9 per cent. (409) of the cases, and mixed in 6.4 per cent. (56); while in the general parentage of all births (1858–1871) 45.34 per cent. were American, 44.76 per cent. foreign, and 9.90 per cent. mixed.

Here we also see that the proportion of plurality cases is greater among the foreign than among the American parents; and this fact, taken in connection with the above, confirms the rule already enunciated by the author,* viz.: the greater the fecundity, the greater the proportion of male births.

ILLEGITIMATE BIRTHS.

It will be seen in the table that native parents have a much larger proportion of males among the births of their illegitimate offspring than foreign parents, though the reverse is the case in the births in general. Foreign mothers have a much larger proportion of male illegitimate children than foreign fathers; thus further corroborating the rule of greater generative vigor of the foreign male.

I have already pointed out some of the causes of the smaller proportion of males among illegitimate births, in my paper on the Statistics of Philadelphia. In it I have stated the causes to be as follows, viz.:

1. Greater proportion of first children.
2. Less advanced age of the mother.
3. Greater vigor of the father.
4. The presence of a condition incident to menstruation, causing the ovule to be fecundated at an earlier stage of development.
5. Want of stimulated ovarian excitement by previous procreative acts.
6. Immaturity of the woman, the system being exercised by vigorous growth, which is antagonistic to the development of the procreative faculties, principal among which is the maturation of ova.†

Nativity of Parents as affecting Fecundity.

	NATIVE.	FOREIGN.	NATIVE AND FOREIGN.
Minnesota, 1871.‡			
Population (per cent.)	63.45	36.55	
Parentage of births (per cent.)	26.38	58.29	7.79
Massachusetts, 1870.§			
Population (per cent.)	75.70	24.30	
Parentage of births (per cent.)	41.01	48.33	10.66
Michigan, 1870.‖			
Population (per cent.)	77.36	22.63	
Parentage of births (per cent.)	48.20	29.68	11.51
Providence (Rhode Island), 1856–1870.¶			
Population (per cent.)	75.00	25.00	
Parentage of births (per cent.)	39.96	50.70	9.34
Rhode Island, 1870.**			
Population (per cent.)	74.60	25.40	
Parentage of births (per cent.)	43.47	45.48	11.05
New York City, 1870.††			
Population (per cent.)	55.50	44.50‡‡	
Parentage of births (per cent.)		78.40	

I believe it is a law that a high degree of fecundity is nearly always accompanied by a high rate of mortality; and we find this point illustrated in the State of Massachusetts. In the ten years from 1862 to 1871, of the children born of American families, 16.47 per cent. died under one year, and 26 per cent. under five years. Of those born in foreign families, 18.13 per cent. died under one year, and 32.79 per cent. under five years. The mortality of the foreigners' children was 10 per cent. greater under one, and 26 per cent. greater under five, than among the children of the natives.§§

STILL-BIRTHS.

Although foreign fathers with native mothers have the smallest proportion of males in their births

* Longevity; or the Relative Viability of the Sexes, etc., etc.,—New York Medical Record, June 16 and July 15, 1873, pp. 297–302 and 353–405; also, in Statistics of Births, Marriages, and Deaths in the City of Philadelphia for the Eleven Years ending 1871,—Penn Monthly, September, 1873, pp. 599–620, and Proc. of Social Sci. Assoc. of Philadelphia, 1873.

† Dr. Henry Hartshorne offers in explanation of this peculiarity the following: In illegitimate births, "where vital energy may be supposed to be above the average (sexual propensity overriding prudence and morals, and thus attesting its own strength), there are three per cent. more than the average number of females." "On the Relation between Vigor and Sex," Proceedings Am. Assoc. for Adv. of Sci., 1872, p. 196.

‡ Vital Statistics of Minnesota, 1871, p. 75. By Dr. Charles Simpson.

§ Vital Statistics of Massachusetts, 1870. By Dr. Derby.

‖ Vital Statistics of Michigan, 1870. By Dr. H. B. Baker, p. xliii.

¶ Vital Statistics of Providence, Rhode Island, 1870. By Dr. Snow.

** Vital Statistics of Rhode Island, 1870. By Dr. E. T. Caswell, p. 54.

†† Vital Statistics of Philadelphia, 1873. By Dr. John Stockton-Hough; Penn Monthly, September, 1873, pp. 600–621, and Proceedings of Soc. Sci. Assoc. of Phila., 1873, pp. 20.

‡‡ Percentages of Population, calculated from Gen. Walker's Census Report of the United States, Washington, D.C., 1870.

§§ Dr. Jarvis, Mass. Report, 1873, p. 215, out of Mortality Reports.

in general, as well as in their illegitimate and twin births, yet when we come to examine the still-births we find the rule is reversed, and they have a far greater proportion of males than the foreign mother with the native father. And this *proportion* is increased when we take into consideration the fact of foreign fathers and native mothers having a much smaller proportion of males in the births in general, viz., 104.18 to 100 females.

The foreign father, therefore, would appear to disturb the harmonious relationship between the proportions of the child and the pelvic capacity of the mother more than the native father with the foreign mother. I am inclined to attribute this greater proportion of males in such cases to a disturbance of the harmonious* relationship above referred to, rather than to any appreciable deterioration or decline in the viability of the offspring under the circumstances, though the latter cause may be operative in a slight degree. If the latter cause be operative, it would appear to be a reflection on the native mother, as I have pointed out in another paper,† wherein it was shown that Massachusetts (18 years, 1852–69), with a proportion of only 105.8 males to 100 females in the births in general, had 146.6 males to 100 females still-born, while Philadelphia (11 years ending 1871), with 110.65 males to 100 females in births in general, had but 134.4 males to 100 females in the still-births. I may here repeat "my conviction in regard to the cause of a larger proportion of males (146.6) in still-births in the State of Massachusetts for the eighteen years mentioned, as being due to defective development, which I believe is clearly chargeable to the incapacity of the mothers. Wherever the proportion of males is high in still-births among parents of the *same nationality* who are treated by equally skilful accoucheurs, I am persuaded that it is a reflection on the mothers."

Of course, the proportion of males (200 to 100 females) occurring in the births where the proportion is 104.18 males to 100 females, indicates a much larger percentage of still-births in this class than in the other class, where there are but 150 males to 100 females still-born out of a proportion of 111.17 males to 100 females.

Where both parents were natives, the proportion of males in still-births was smallest of all, viz., 127.27 males to 100 females; and where they are of the same American or foreign State, the proportion is slightly increased, viz., 135.71 males to 100 females. Where both parents were foreign (often of different nationalities), the proportion of males is increased more than two and a half times, viz., 320 males to 100 females, while parents of a different American or foreign state give a proportion more than three and a half times as great (450 males to 100 females) as where both parents are native. One would easily infer from all the above that the proportion of males in still-births among consanguineous marriages would be reduced to a minimum, at least so far as the harmonious correlation of the cephalic and pelvic parts was operative, however much the viability of the fœtus might be lowered.

Of 137 children who were still-born (in Providence, 1870),‡ 70, or one in 13.40, had American mothers, and 56, or one in 12.82, had Irish mothers.

The effect of a different nationality of either parent from the other on the proportion of sexes and percentage still-born is certainly very remarkable, and I trust statisticians will give more attention to the arrangement of the parent-nativity of children than they have hitherto done, in order that more extensive comparisons may be made in the advancement of biological science.

The United States census of 1870 gives only 99.89 males to every 100 females in the native-born population, while in the foreign-born population there were 117.01 males to every 100 females.

"Examining the records of New York City for 1870, we find that, while the number of *deaths* of natives is nearly double that of foreigners, the number of *births* of children, both of whose parents are *foreign*, is almost *four to one* of those whose parents are both native. For so great a difference there must be a cause. Dr. Nathan Allen§ ascribes it to a deviation from the normal harmony of development of all the organs and functions, owing to unsanitary modes of living amongst women, as well as men, in this country."‖

In observing the relative fecundity of foreign and native parents, it must not be forgotten that the foreign element in the population, almost necessarily, in a newly-settled state, is principally of an age capable of reproduction, while among the natives there is a far larger proportion of children and the aged. Dr. Baker, the compiler of the Michigan report, calls especial attention to this point, and I cannot do better than quote his own words. He says, "It appears that the per cent. of all parents to total population was [in 1870] 4.24; the per cent. of native-born parents to native population, only 3.13; while the per cent. of foreign-born parents to foreign-born population was

* Dr. Henry B. Baker, in the "Fourth Registration Report of Michigan, 1870," pp. 65–6, gives out an opinion which is corroborative of the view taken by the writer. His opinion is expressed in the following words: "Among physicians it is well known that there is a correlation between many portions of the body, the cause of which is not always apparent. There also appears to be, as a rule, a peculiar harmony between the size and shape of the head of the child and the size and form of the pelvis of the mother. A comparison of Table XV. with Table VII. suggests the question whether there may not be some disturbance of this harmonious relation when the father is of one nationality and the mother is of another."

Dr. Playfair, in commenting on some of the conclusions arrived at in Mr. Fred. W. Lowndes's valuable paper on the Statistics of "Still-births" (Trans. Lond. Obstet. Soc., 1872, vol. xiv. pp. 283–303, p. 303), says that the results of Mr. Hayser's and Dr. Hamilton's experience and observation indicated "that the number of still-births diminished in exact ratio to the frequency with which the forceps were applied." Dr. Hamilton habitually used the forceps in about the ratio of one in every seven or eight labors, and obtained the unprecedented result of seven hundred and thirty-one consecutive labors without a still-birth. In view of these facts, then, the obstetrician, when engaged to attend a confinement, should inquire the nationality of the parents, and expect to apply the forceps from two to four times as frequently where the parents are of different nationalities, as where they are both natives.

† Statistics relating to Births, Marriages, Deaths, and Movement of Population in the City of Philadelphia for the Eleven Years ending 1871, —Penn Monthly, September, 1873, and Papers of Social Science Association of Philadelphia, pp. 24, p. 22.

‡ Dr. E. M. Snow's Report, 1870, p. 56.

§ Trans. Am. Med. Assoc., 1870, p. 381.

‖ Henry Hartshorne, M.D., Proceedings of the American Association for the Advancement of Science, 1872, p. 197,—"On the Relation between Vigor and Sex."

8.19. It should be remembered in this connection that the foreign population includes, with slight exceptions, only those of an age capable of reproduction, while the American or native population is made to include all the children of both native and foreign-born parents, making the native population appear very large, and the per cent. of native parents to total native population very small."*

I have already enunciated the law, "the greater the fecundity (single births), the greater the proportion of males,"† and, as we have shown that foreign-born parents have a larger proportion of males in their births than native-born parents, they are consequently more prolific. In mixed parentage, the principle of sexual differentiation would tend to affect the application of this law to the relative proportion of sexes born to such couples.

The conclusions arrived at in this paper, from the theories supported, are as follows:

1. That foreign-born parents are more prolific and have a larger proportion of male children than native-born parents.

2. That where the mother is foreign-born and the father native the fecundity is greater, and the proportion of males in the births, in general, is also greater, and among the still-births less, than where the mother is native and the father foreign-born. It is the mother, then, who principally controls the fecundity.

3. That the begetting of males on the part of the mother requires a more perfect or thorough (developmentally higher) procreative faculty than the begetting of females.

That the begetting of females on the part of the father requires more procreative vigor on his part than the begetting of males.

4. If it be true, as was alleged by Sir James Y. Simpson‡ and others, that the increased proportion of males in still-births is principally due to the greater size of the male fœtal head, then the greatly increased proportion of males (from 135.71 to 450) in still-births among children whose parents are of different nationalities, over those of the same nationality, points to a larger brain as the result, and argues much in favor of cross-breeding as a means of improving the stock.

From an examination of the table it would appear that the foreign *father* from his alliance with the native mother is principally responsible for the great excess of males in still-births from such a union, as compared with the number of still-born to foreign-born mothers with native fathers. This view of the matter would seem to indicate that foreign-born fathers propagate greater cephalic fœtal development than native fathers, or that the pelvic capacity of native mothers was less than that of foreign-born mothers; probably the latter is principally operative.

2003 WALNUT STREET, PHILADELPHIA, September, 1873.

* Fourth Registration Report, 1870, p. 41.

† Article on Relative Viability of the Sexes, etc., Med. Rec., June and July, 1873; also, Statistics of Philadelphia, Papers of Philadelphia Social Sci. Assoc., from Penn Monthly, September, 1873, p. 22.

‡ "Sex of Child as a Cause of Difficulty,"—Edin. Medical and Surgical Journal, October, 1844, p. 387, and Gynæcological Works, N.Y., 1871, pp. 307-63.

A CASE OF FALLOPIAN PREGNANCY,

WITH RUPTURE OF CYST, AND DEATH IN THIRD WEEK.

BY J. H. CATHCART, M.D.,
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THE following case may be of interest to the profession, not only on account of its rarity, but also from the extreme difficulty of making a correct diagnosis, and the little benefit to be derived from any treatment.

A few weeks ago, November 8, 1873, about eight o'clock P.M., I was called to see Mrs. H., a fine healthy-looking mulatto woman, about 26 years of age. I found her suffering from a rather severe pain in the left iliac region, which had been present more or less throughout the day,—not bad enough, however, to prevent her from performing her usual household work. This pain had increased in intensity towards evening so as to compel her to send for me.

I found her in bed, lying on her left side, and complaining of the excessive pain in that part. Her pulse was feeble and 98 in the minute, respiration 48 and entirely thoracic. The skin was cool and moist. The bowels had been opened only a few minutes before I saw her. She complained of extreme nausea, but had vomited only once. The mind was clear, and she could converse quite rationally.

I prescribed a slight anodyne, with ammonia and brandy every fifteen minutes, but before the time for the third dose of the anodyne the pain had entirely left her, so it was omitted. I saw her again at nine o'clock, and found her absolutely pulseless, with the body and extremities cold. The heart was beating very irregularly, so that it was useless to count it. The carotids were the only arteries in which I could detect any pulsation whatever. The head was cool and covered by a cold, dewy perspiration. She was somewhat stupid, it being necessary to repeat a question in loud tone to arouse her or receive a reply, though it was always correctly and rationally given. She presented, in fact, the whole *ensemble* of collapse.

I endeavored by all possible means, by stimulating her, by warm applications to the extremities, and otherwise, to rally her, but in vain; though towards eleven o'clock there was a slight increase in the temperature of the skin, and the pulse might be felt at the wrist, but very feebly. Her mind was not so clouded, and she appeared better generally, and inclined to sleep. But, in spite of all we could do, she began to sink, and a few minutes before one o'clock she expired, passing away without the slightest struggle or indication of pain.

I was quite at a loss for a cause for such a sudden end. She had presented no toxic symptoms, neither was there any history of aneurism or heart-trouble. Nor was there anything to draw my attention particularly to the sexual organs: in fact, there was nothing in her previous history or in her present condition fully to account for her trouble.

She had been extremely irregular in her menstrual periods ever since her marriage, which had

taken place four years ago. She had had her last sickness but three weeks before the time I saw her. This she told me herself, and was corroborated by her husband, who also informed me that there had been a very slight show the Monday previous. She had complained for several weeks of extreme tenderness on pressure and a constant pain in the region of the left ovary. She had had one child three years ago, and in January last had miscarried when in the third month of gestation.

On a post-mortem examination, which was made thirty-four hours after death, by Drs. Porter and Willard and myself, all the abdominal organs presented a healthy appearance. The cavity of the peritoneum was filled with blood,—more fluid than coagulated,—in quantity more than a gallon and a half. The uterus was retroflexed, the fundus lying fairly in the hollow of the sacrum.

The uterus and upper part of the vagina were removed, and presented a completely bloodless condition. The right Fallopian tube was crooked and contorted; the fringes of the fimbriated extremity are partly adherent, but the orifice is not entirely occluded; the probe of an ordinary pocket-case can be passed up three inches. There are bands of old transparent adhesions between the ovary and extremity of the Fallopian tube, and broad thin bands attaching the right ovary to the posterior surface of the uterus.

The extremity of the left Fallopian tube is in the same condition as that of the right. There are some evidences of previous inflammation between the posterior surface of the left Fallopian tube and the ovary, and there are broad bands connecting the posterior surface of the left ovary and its right extremity with the posterior surface of the uterus. A probe can be passed up the left tube about three and one-eighth inches; at this point there is a partially collapsed cyst, which is vascular with small vessels ramifying on its surface. This cyst is about one and three-eighths inches long by seven-eighths of an inch broad, and is oval in outline. On its upper surface, a little posteriorly and a little nearer its inner than its outer end, is a round orifice, from which projects a yellowish-reddish fringed mass which resembles a clot of blood. It was from this opening that the hemorrhage occurred.

Upon opening this cyst it is found to contain anteriorly two dark-colored soft coagula the size of peas, and a reddish-yellow mass which is rough and shaggy on its exterior. Upon opening the latter it is found to contain a second cavity the size of an almond-kernel; this is lined by an exceedingly delicate, thin membrane, resembling in appearance a serous membrane. No fluid was discovered in it. This cavity, so far as we are able to discover, does not communicate with the orifice from which the blood escaped.

This yellowish mass is undoubtedly a product of conception: when a small portion of it is placed under the microscope, it is found to consist of placental tissue, and the branched villi of the chorion, curved with an epithelial layer, are everywhere visible. At first it was thought that the cells which compose the tissue proper of the villi were in a state of commencing fatty degeneration; but on a more careful examination this was found not to be the case.

Between the cyst already described and the left side of the fundus of the uterus is a second tumor, which is nearly round in outline, regular in shape, one inch long by three-fourths wide; it is not vascular on its exterior; it is dark-colored, and feels as if filled with a semi-solid substance. Upon opening it it is found to be filled with a soft coagulum of blood, the exterior of which is dark-colored, and the interior is of a Spanish-brown color and has a granular appearance. The fluid portions of the blood have largely been absorbed. There are trabeculæ running across, and the lining membrane is smooth. There is no communication between the two cysts, and neither can be entered from the uterine orifice of the Fallopian tube.

Both ovaries are large and healthy, and at the inner extremity of the left one is a large corpus luteum one-half inch in diameter, and the orifice through which the ovum has escaped is plainly visible and only recently closed. There is no corpus luteum in the ovary of the right side.

The uterus is four inches long, and its walls are about seven-eighths of an inch in thickness; the cavity is three and one-eighth inches long, and the cervix is filled by a thick amber-colored plug of mucus. The lining membrane is pale, thick, and spongy, and appears to be covered by a thin, delicate exudation. The microscope shows the mucous membrane hypertrophied, the glands enlarged, and the inter-glandular tissue in a state of proliferation. The muscular constituents of the organ are also enlarged and easily studied in all their detail of structure. The whole organ appears, in fact, to be undergoing a physiological change in sympathy with the process taking place in the Fallopian tube, and resembling closely that which takes place in a perfectly normal pregnancy.

The most important feature of this case is in the early rupture of the cyst: the fœtus is undoubtedly under twenty days' development in appearance, and the history of the case would appear to corroborate this age.

Out of a record of two hundred and twenty cases of extra-uterine pregnancy, there are sixty-one occurring in the Fallopian tube, and of those which terminated within the second month there are only four cases reported,—viz., by Langstoff, in Transactions of the Medico-Chirurgical Society of London, 1817, vol. viii. p. 502; by Littré, in Mém. de l'Acad. des Sciences, for 1702, p. 209; by C. D. Meigs, in the *Medical Examiner* of November 9, 1839, p. 709; and the case of Ollivier (d'Angiers), *Archives Générales de Médecine*, second series, p. 403, mentioned by Bernutz and Goupil in Clin. Memoirs of Diseases of Women, New Syd. Soc., 1866, vol. i. p. 236. There is a fifth case reported by Dr. R. P. Harris, of this city, in the Proceedings of the Pathological Society of Philadelphia, vol. i. p. 302, in which the cyst ruptured at the fourth week, or about the time there was an attempt at menstruation.

These are the only cases I have been able to obtain any record of in which the rupture took place

so early: so that in the present case the rupture of the cyst is without parallel as to its time of occurrence.

[We would call attention to the exceedingly interesting discussion this paper gave origin to at the Pathological Society, as reported in the current number of the *Philadelphia Medical Times*.—ED.]

ESMARCH'S METHOD FOR BLOODLESS OPERATIONS.

BY W. W. KEEN, M.D.

THE practice of diminishing the amount of blood lost in an operation by elevation of a limb, and by bandaging it before the application of a tourniquet, is nothing novel in surgery. The method lately introduced into practice by Prof. Esmarch, however (see *Philadelphia Medical Times*, November 22, 1873, p. 125), produces an utterly new result, viz., an *absolutely bloodless operation*, as if on a cadaver. The advantages are manifest. Fewer assistants are needed; the parts are not obscured by blood, nor the operator annoyed by the necessity for sponging; the most careful dissections can then be made precisely as if on the dead subject; a prolonged operation involves no more loss of blood than a trifling one; and, more than all, the patient is saved the shock and depression caused by the hemorrhage,—in fact, he has gained, as if by transfusion, the blood that was in the amputated part.

The method being new, I have thought it best to report the following case at once, as the interest lies in the method of operation, and not in the result of the case, though that is, so far, a favorable one.

Edward Lee, æt. 20, of a scrofulous constitution, had caries of the left tibia, at the age of eight, with slight caries in the right tibia, and also in one of his ribs, but recovered completely. Nearly a year ago, following a blow, he had a return of the disease in the left tibia and the tarsus. When I first saw him, last July, he was so exhausted that I scarcely believed it probable he would live two weeks; but under careful attention, good diet, tonics, etc., he improved, till his condition has been quite favorable for the healing of the caries for some months past. After waiting till he began to fail rather than improve, I operated on his leg, December 9, 1873, with the assistance of Drs. Allis, Allison, and Bray, and several students. Dr. Allis administered the chloroform by his new apparatus, which used but three and a half drachms in the thirty-five minutes, or six minims a minute.

I obtained from Mr. Levick, on Chestnut Street below Eighth,* a bandage of pure rubber two and a half inches wide and five yards long, made of four strips hastily but strongly joined together. Beginning at the toes, I applied the bandage up to the middle of the thigh, keeping it on the stretch all the while, and making no reverses, as the elasticity of the bandage removed the necessity. At its upper border I wound tightly around the thigh a rubber tube five feet long and half an inch in diameter, with a quarter-inch calibre, encircling the thigh four times, and securing the ends by the simple hooks used for dissection. It will be observed that this is a very difficult place to compress the femoral artery, as it lies deep among the muscles. I now removed the elastic bandage, and the leg was as blanched as that of a cadaver. For fear the method might not succeed, I applied a tourniquet loosely around the thigh, above the rubber tube, but found it a needless precaution.

I then cut down upon the bones and examined them with a view to resection, but found the disease far too extensive to admit of it: so I at once amputated by the flap method, just below the tubercle of the tibia. Not a *single drop* of blood was lost up to this time. I used the sponge only once while examining the bone, in order to remove the serum which exuded from the œdematous soft parts. The condition both of the soft parts and the bone was most readily determined by the eye, as they were unobscured by any blood, and the flaps were so pale that they resembled veal in color. Having secured the anterior and posterior tibial arteries and a large muscular branch, I gradually loosened the rubber tubing, when the blood returned to the stump, and some small arteries bled, but not till the last turn of the tubing was loosened, so perfect was the compression. Two additional ligatures on muscular branches were required, and three more were twisted, a little cold water stopping the rest. The total amount of blood lost during this last stage of securing the smaller arteries which could only be discovered by their spirting was less than one ounce.

December 13.—The stump was dressed with pure laudanum for two days, and after that with nothing. So far, not an unfavorable symptom has occurred. No pain or other trouble has resulted from the compression by the tubing. Scarcely any shock followed the operation, and since the first few hours the patient expresses himself as feeling far better than before the operation. He sat up in bed yesterday, three days after the operation.

P. S. December 19.—Delay in printing the case enables me to report that he was out of bed on the seventh day, and all of the wound has now united, except about one and a half inches.

In reply to the criticism of "Unguis" on Esmarch's method, in the issue of this journal for December 13, I beg leave to call his attention to the first two sentences in this communication, which was written before his article was published. The practice of previous surgeons resembles that of Esmarch, but is really totally different in its results. It is the old story of Dromio of Ephesus and Dromio of Syracuse. I venture to doubt whether "Unguis" or any other surgeon ever saw a bloodless amputation or resection before Esmarch taught us how to make it.

* At my suggestion, Mr. L. has made continuous bandages one and a half and two and a half inches wide, of any length.

M. GUÉNIOT reports (*L'Union Médicale*, November, 1873) a case of fatal operation for strangulated hernia in a child three months old.

PHILADELPHIA

MEDICAL TIMES.

A WEEKLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

PUBLISHED EVERY SATURDAY BY

J. B. LIPPINCOTT & CO.,

715 and 717 Market St., Philadelphia, and 25 Bond St., New York.

SATURDAY, DECEMBER 27, 1873.

EDITORIAL.

TO OUR CONTRIBUTORS.

THE experience of the last few weeks has been of such character, the time consumed in personal interviews and in letter-writing has been of such amount, as to convince us of the propriety of saying a few words from the editorial chair to the contributors to the journal. In the first place, we desire to thank the numerous contributors for the zeal they have displayed in sustaining the Original Department of the journal,—a zeal whose fruits are shown in the fact that the appropriate drawer in the editorial sanctum contains enough original matter to occupy the columns of the *Times* to the middle of February,—a zeal, too, not without knowledge, as the quality of this matter will, we think, testify, when we lay these numerous papers before our readers. An embarrassment which grows out of this most desirable repletion is that some communications must wait publication for a greater or less length of time. We certainly think it only right for the interest of the journal and for the good of the contributors that editorial judgment should be exercised in holding some papers back and pushing others forward. It is evident some memoirs will keep, and some will not keep,—that a paper on the latest novelty will lose its freshness if not put forth at once, while a communication copied from some ancient papyrus, although perhaps no less interesting, and it may be even more important, than the other, can tarry a short time in the editorial sanctum without suffering. So far as may be consistent with the best interests of all concerned, communications shall, however, appear in regular order; but we earnestly hope that no one will judge our valuation of his communication by the early or late appearance of it.

Again, no young or old author need worry himself about the non-acceptance of his paper, for, at least until further notice, all papers not accepted shall be returned at once.

If our contributors will pardon our boldness, we would ask them to remember the fact that, in this era of high pressure, high-pressure condensation is most desirable; that when an idea is stated clearly in ten lines it is read by ten times as many people, and remembered ten times as well, as if it had been put in a hundred lines.

When a contributor in the city desires to correct the *proofs* of his article, he should always write upon the MS., near the heading of it, "Send proofs to Dr. ——, address, so and so." Otherwise, proofs will probably not be received.

The only conclusion we can draw from the very great influx of good original papers is that our contributors share the opinion which we hold, and have expressed before,—that it is possible to build up here in Philadelphia a medical paper which, as an exponent of scientific clinical medicine, shall take rank with any other in the world; which shall be a centre to give consistency and force to medical public opinion, both in its action upon the individual members of the profession, and, what is even more important, in its influence upon the world outside of the profession. Every little while we see evidences that the *Times* is wielding such an influence,—an influence which, although perhaps weak at present, we trust may grow, and be ever used for the perfecting and the exalting of our profession. We are informed that the City Board of Trusts have quietly abandoned their position in regard to the Sunday clinics, and we think our readers will agree with us that Dr. Sly will be for some time more sly and less open in his advertisements than he has been. In order to increase this influence, it is necessary that the circulation of the journal be increased. It is directly to the interest of every contributor that the circle of physicians whom his contribution reaches shall be widened. It is also directly to the interest of every one of our present subscribers that our circulation be increased. The reason our paper is not so large as a London weekly is simply that the subscription-list does not warrant the outlay. The *Philadelphia Medical Times* is to-day one of the cheapest journals in the country,—if indeed it be not the cheapest,—costing the subscriber only an infini-

tesimal fraction over half a cent for a double-column quarto page. In the last six months we believe it has been more extensively quoted than any other American journal, both at home and abroad. We think, then, our contributors and subscribers can conscientiously recommend the journal to their neighbors. We feel that it is the interest of the whole profession of the country to have what it has never had in this country, a popular weekly medical journal comparable to the London papers, representing no interest but that of the general profession. The publishers of the *Philadelphia Medical Times* do not run it with the idea of making money out of it directly,—are willing to spend all they may receive. Will you not, then, induce your friends and neighbors to subscribe for the *Philadelphia Medical Times*, and aid us in reducing the price of the journal to one-quarter cent a page?

LEADING ARTICLES.

PROFESSOR AGASSIZ.

BY the death of Professor Louis Agassiz, which occurred in Cambridge, Mass., on the evening of December 14, this country has suffered a loss of the greatest magnitude, and one which is perhaps altogether irreparable. There remain men equally eminent in some departments of science, men of equal ability as public expounders of scientific truths, and men whose earnest and self-sacrificing devotion to scientific labors cannot for one moment be questioned; but there is probably not one who, combining in himself all these elements of success, possesses, in addition, the skill in observation, the personal magnetism, the noble singleness of soul, the great originating and organizing talent, and the ceaseless untiring energy which characterized Professor Agassiz, and enabled him to become the father of popular scientific education in America, and one of the greatest natural philosophers the world has ever produced.

It is a rare combination of qualities which enables an individual to conduct work requiring exhaustive industry and minute research; to make the broadest generalizations from the results of his own labors and those of others, and at the same time to so impress the public mind with the value of those labors as to draw forth thousands of dollars as contributions to the cause of science. It was through his influence that the government of Massachusetts was induced to appropriate money for the erection and support of a museum of natural history; it was by his advice that the United States Coast Survey organized expeditions and explorations which have proved to be of the highest practical importance; and it was his zeal and enthusiasm which incited private citizens to assist in defraying the large expenses of those expeditions, and to furnish money and land for other purposes equally dear to him.

Much of his success in these particulars was undoubtedly due to his quick, sympathetic temperament, his native tact and eloquence when discussing any subject on which he felt deeply, and his remarkable self-denial in the pursuit of that science to which his life had been so thoroughly and completely devoted. There are few instances, apart from those of religious fanaticism, of such utter abandonment of ordinary aims and ambitions, and of such intense concentration of all mental and physical energies upon one idea; but with Prof. Agassiz the breadth, scope, and comprehensiveness of that idea raised him far above the level of all fanatics, whether religious or scientific. Although his opportunities for turning his knowledge and reputation to pecuniary profit were many, he invariably and consistently refused to embrace them, partly because he felt that he had "no time to make money," and partly because he was unwilling to overstep by a hair's breadth the strict limits within which he knew himself to be unquestionable authority. It was chiefly for the latter reason that he refused on one occasion to visit a tract of land situated but a day's journey from Boston and owned by a company engaged in an honorable and reliable undertaking. He would have been asked merely to certify to well-known and authenticated facts, and thus add the weight of his name to the venture; but he declined, though conscious that in doing so he lost a ten-thousand-dollar fee, because, as he expressed himself in conversation, he felt that there were others whose labors and studies had better fitted them to give an opinion entitled to respect. While thus prompt to refuse to go beyond his self-appointed sphere of thought and action, he was equally prompt to resent interference from those whose knowledge and researches he knew to be superficial and limited; and any suspicion of imposition or falsehood was sufficient to excite in him the most profound contempt. Thoroughly honest in all his convictions, making no effort to appear what he was not, and never influenced by any but the most upright and conscientious motives, he despised all hypocrisy in others, and above all in those who prostituted science to what he considered mere personal aggrandizement.

He was not, however, quixotic in his ideas, nor did he imagine that all men should conform to one

standard, or be devotees to abstract truth; but, on the contrary, he held in great respect all honorable success, either commercial or professional.

Having once deliberately chosen his position in an argument or controversy, he was slow even to obstinacy in yielding an inch to an opponent; and his bitter opposition to Darwinism is scarcely less memorable than his pertinacious defence of his celebrated glacial theory, and of his claim to priority in its origination. Although he let slip few opportunities of expressing his uncompromising hostility to the doctrine of evolution, he never made the mistake of confounding the theory with the theorist, and he invariably spoke in the highest terms of Mr. Darwin. On one occasion, while delivering a chatty afternoon lecture on shipboard, after having spent some days in cruising among the Galapagos Islands, one of the scenes of Darwin's early labors, he alluded to the impossibility of visiting that region, or, indeed, of approaching any scientific subject at the present day, without thinking of that gentleman, and sincerely and heartily eulogized him as "a keen observer, an indefatigable laborer, an honest, conscientious, and pains-taking investigator, and one of the most lovable of men."

He valued highly the opinions of those whom he knew to be his peers in the scientific world, but, as a rule, entirely disregarded all criticism of himself or his doings, whether favorable or the reverse.

His personal appearance was of the most prepossessing character, and his manner cordial, good-humored, and markedly free from constraint. He was somewhat under the medium height, with a massive head, bent slightly forward, and resting on a thick-set sturdy frame. His keen bluish-gray eyes always had a laugh lurking in their depths, and never failed to show a kindly and affectionate interest in those who approached him for help or sympathy. His hands were sinewy and firm, and so educated to precision and accuracy of movement by many delicate dissections that at the age of sixty-five he shaved his face daily without the aid of a glass, never omitting to do so even while at sea during decidedly rough weather. His manner took no note of social rank or station, and he was equally affable to an admiral or a common seaman, to a prince of the blood or a fish-huckster.

He was always ready and pleased to impart information to any one seeking it in the proper spirit, and did so in the clearest and most charming manner imaginable, making the dullest subject seem interesting, and investing it with a more extended significance by some illustrative or cognate fact.

His command of language was remarkable: he could deliver an extemporaneous address in either French, German, or English, rarely hesitating for a word; and though when he used the latter tongue a slight foreign enunciation was observable, it could hardly be called an accent.

There is space for but a brief account of his life, the general outline of which is familiar to nearly all educated Americans. Louis John Rudolph Agassiz was born at Motiers, Canton of Neufchâtel, Switzerland, May 28, 1807. He was of Huguenot descent, and his lineal ancestors for six generations were clergymen, his father being pastor of the Protestant parish of St. Imier. His mother, who was the daughter of a physician, commenced his education, which was at first intended to fit him for the ministry, but was subsequently, owing to his strong natural inclination, directed towards the study of medicine. Indeed, in later life, although he never spoke disrespectfully of the clergy as a class, he said with much feeling that they were the most determined and obstinate adversaries with whom he had had to cope in his struggle for popular scientific education, and it seemed evident to at least one of his hearers that he compared the professors of theology rather unfavorably with those who cultivated the more exact sciences. His studies were continued at the Gymnasium at Biel and the college at Lausanne, after leaving which he went to the medical school at Zurich, and thence to the University of Heidelberg, where he studied anatomy and physiology under Tiedemann, zoology under Leuckart, and botany under Bischoff. He seemed always to retain his affection for this university, where, although it was not his *alma mater*, he won great distinction as a student, and recently he recommended it as the most pleasant of the European colleges for scientific labor.

At the age of twenty he entered the University of Munich, studied under Oken and Martius, made investigations in the embryology of animals with Döllinger, at whose house he lived, and began the publication of brief treatises on special subjects. On the return of an exploring expedition from Brazil he was appointed to compile for publication the discoveries relating to fishes, and after engaging in this work he abandoned the Æsculapian art, having graduated as Doctor of Medicine at Munich and obtained the degree of Doctor of Philosophy at Erlangen.

During his studies in Paris in the investigation of fossil fishes he became acquainted with Cuvier, whose influence upon him is said to be discernible in many of the views with which Agassiz was afterwards identified. It was doubtless about this time also that he

acquired the familiarity with the contents of the European museums of ichthyology, which enabled him all his life after to say with almost absolute certainty how many duplicates of any particular specimen were in existence, and what was their precise condition and state of preservation. He was almost the sole author of the science of fossil ichthyology, his great work upon which he was enabled to publish through the liberality of Baron von Humboldt. This was followed by his work on the fresh-water fishes, by the *Nomenclator Zoölogicus*,—an index of names and classification for the entire animal kingdom,—and the *Bibliotheca Zoölogiæ et Geologiæ*, containing a list of authors on natural history subjects, with critical notices of their writings. Professor Agassiz himself attributed his success partly to his intimate knowledge of the manner of working of his predecessors and the results obtained by them, and frequently remarked that students generally, and particularly medical men, were too apt to consider as useless whatever was a little antiquated or out of date.

In 1837 he propounded his glacial theory, one of the most original conceptions in the whole arcana of science; and ten years later he published his *Système Glacière*.

In 1846 he came to this country, and the following year accepted the chair of zoology and geology at Harvard; and thenceforth he spoke of himself, and was proud to be considered, as an American.

Although he was the constant recipient of testimonials and offers from abroad, he absolutely refused all, preferring to remain among the friends with whom he had become identified, and in a country he so greatly honored by his labors. In 1848 he went to Lake Superior, and in 1850 to the Florida Reefs, both journeys being productive of most valuable results. In 1865 a Boston merchant defrayed the expenses of his celebrated expedition to the Amazon River, during which thousands of new species were discovered, and the museum at Cambridge was enriched by many valuable additions.

In 1871 Professor Agassiz left Boston, in the *Hassler*, a vessel equipped by the United States Coast Survey for the purpose of taking deep-sea soundings, and furnished through private liberality with the means of securing and preserving zoological specimens. This was probably his most important expedition, as it was certainly, in his own opinion, the most interesting. His success in collecting was wonderful, and probably about one hundred and fifty thousand distinct zoological specimens were sent home during the cruise, three thousand five hundred gallons of alcohol being used in their preservation. The figures are interesting, as illustrative of the scale on which he always worked when not hampered by want of means. He had hoped to announce the importance of this collection within a twelvemonth, and had already devoted considerable attention to the family of Selachians, studying with great care their modes of dentition and characteristics of growth and reproduction. His generosity with money was almost princely, and no price was too high to pay for a coveted specimen; yet all his life long it displeased him to see any one waste a scrap of writing-paper, and his manuscript was always finely and closely written, with no blank lines or spaces. He was unable to forget the times when his income was five hundred dollars a year, half of which went to artists for drawings, one hundred and fifty more being expended for books, and the remainder devoted to his personal expenses. In those days he was compelled to economize even his writing-paper, and thus formed a habit which he never outgrew. During the Hassler expedition it was very observable that in all countries the mere name of Professor Agassiz was sufficient to insure marked attention from every one, and individuals of all ranks and classes proved themselves not only willing but eager to give him every possible assistance. His sixty-fifth birthday was celebrated in the heart of the Andes, a mile above the level of the sea; and on that day he seemed so well and so full of health and vigor, that the wishes of "long life and continued success," though destined to be unfulfilled, seemed far from unreasonable. He considered that the result of the Hassler voyage was to place the Cambridge museum "actually in advance of all existing institutions in zoological researches."

On his return, with but a very brief interval, he commenced the foundation of a natural history school at Penikese Island, which was presented to him for that purpose, together with a large sum of money, by a New York gentleman. The primary object of this undertaking was to encourage teachers to dispense with books and employ natural objects in giving instruction, and its success seemed almost assured.

He had suffered for some time with brain-trouble,—according to his own views, a chronic inflammation of the *crura cerebri*,—which was invariably aggravated by excitement or over-exertion, either mental or physical. His weighty responsibilities and diversified enterprises, added to the intense and eager interest which he always took in any pursuit in which he was engaged, perhaps hastened the fatal conclusion of his labors. At his death he was a member of the French Academy of Sciences, of the

Royal Society of London, and of our own National Academy of Sciences. He held the Monthyon prize and the Cuvier prize from the Paris Academy, the Wollaston medal from the Geological Society of London, and the medal of merit from the King of Prussia. The Edinburgh and Dublin Universities had conferred their degrees upon him.

In special departments of natural science he has probably been excelled by not a few; but taking the whole round, including zoology, geology, palæontology, and their allied subjects,—embryology, comparative anatomy, etc.,—he had attained a uniform degree of eminence which has been rarely, if ever, equalled. As a public lecturer he seldom failed to kindle in others the enthusiasm which glowed within himself, and his success gave an impetus to science in this country which it had never before received. Certainly no one ever brought to any occupation a more profound sense of its grandeur and nobility, a loftier estimate of its relations to mankind, or a more steadfast purpose to consecrate his whole life to it, than did Professor Agassiz to the study of nature; and his feeling of reverent humility is frequently noticeable in his writings. "Even though we can make ourselves conscious that the works of nature are built by mind, and that it has pleased the Maker of all things to give us a spark of that life which makes us to be His children, formed in His image, that evidence is nowhere stronger than in the fact that our mind is capable of studying those works to a limit which approaches to a comprehension of their wonderful relation to one another."

In his daily intercourse with his family and friends Professor Agassiz was simply faultless; and in tone, manners, and deportment he was everything that beseems the perfect gentleman. No one who knew him could fail to love, respect, and venerate him, and to feel his death as a personal loss and affliction; but he has been mourned over the whole land with a sincerity which shows how high a place he had won in the hearts of the people of his adopted country.

> "His life was gentle, and the elements
> So mixed in him that Nature might stand up
> And say to all the world, *This was a man.*"

J. Wm. White, M.D.

Ice in the Treatment of Facial Neuralgia.—M. Wenteritz reports a case of very intense facial neuralgia, which resisted every mode of treatment, that finally yielded to the application of ice along the affected side of the face, laid on at periods of five minutes. The pain disappeared in twelve hours, and, after an interval now of ten months, has not returned.—*Med. Press.*

CORRESPONDENCE.

SOME LATE MEDICAL ATROCITIES.

Mr. Editor,—In your issue of December 6 you use this very significant expression: "Whither are we drifting?" Echo answers, Whither? You have just indulged in a grand scolding of the Board of City Trusts with reference to certain exactions which this grave body desires to impose upon the Medical and Surgical Staff of Wills Hospital for the Treatment of Diseases of the Eye and Ear, in regard to keeping the dispensary open on the Sabbath. I am rejoiced to learn that the staff have rebelled against such a presumptuous assumption of power without any conference upon the subject with the gentlemen concerned, and that you have struck a blow under the fifth rib, so well merited in every case of this kind. Usurpation of trust or power should always be pointedly rebuked. It is high time that the managers of our charities should know how to treat their medical officers; it is too commonly the case that they consider them as their servants, instead of their equals, or superiors: to regard them in any other light than the latter is simply an outrage. Whatever concerns the interests and the dignity of a medical charity is as much the business and the right of the medical and surgical staff as of the Board of Managers, however exalted their social or political status. There should be the most perfect good feeling between the two boards; and any attempt at a display of superiority of the one over the other, or an assumption of power that does not properly belong to either, should be promptly rebuked and discountenanced. The physician is not a servant, but a gentleman; not the subordinate, but the equal, in every essential particular, of any member of any Board of Managers whatever under whom he may hold office.

But I find that I have unconsciously digressed from the subject to which I desire more particularly to call the attention of the reader. I allude to certain recent professional atrocities, of so glaring a nature that it is quite surprising that they should not have received merited rebuke and condemnation. We may well ask, "Whither are we drifting in the practice of our profession?" When Madame Roland was dragged to the scaffold, she was heard to exclaim, "O Liberty, how many crimes are committed in thy name!" and the same language is, I am sure, justly applicable to some recent professional novelties, introduced for the special purpose of torturing human beings and bringing disgrace upon the art and science of medicine and surgery. What, for instance, could be more revolting and diabolical than the insertion of the hand and the whole of the forearm, as high up as the elbow, of a big-fisted son of Æsculapius into a poor woman's bowel, to explore her pelvic organs, or to tickle her solar plexus when she has swallowed an overdose of chloroform or some other narcotic poison? Look for a moment at the operator as he is about to engage in this invention of the devil. He deliberately takes off his coat, rolls

up his shirt and flannel sleeves, oils his limb, and then begins the work of insinuation, expanding first the sphincter muscles of the anus, and then going higher and higher, until his fingers touch the diaphragm, pausing meanwhile to take a full breath, to feel about for something, God knows what, and then tickling, in real earnest, the great sympathetic nerves. Can there be anything more outrageous or more disgusting than such a performance? What necessity is there for such a feat? Cannot the same ends be attained by stimulating applications to the spine, the use of the galvanic battery, flagellation, cold affusions, the insertion of ice into the rectum, and other means? In a case of chloroform-poisoning recently treated by this method, the shameless operator carried his hand four inches above the umbilicus, or a distance of sixteen inches from the anus, and, not content with tickling the diaphragm, ran his fingers against the walls of the abdomen, so that an assistant could distinctly feel them on the outside, and then, as he withdrew the limb, he must needs carry the hand around the uterus and its appendages in search of displacements and fibroid tumors, although such manipulations were entirely foreign to the nature of the case. Then the operator, we are told, as if in ecstasy at his achievement, withdrew his hand, which was not in the "least stained with blood," and found, apparently much to his gratification, that the greatest dilatation of the anus was only ten inches in circumference, corresponding strictly to the size of his delicate forearm. *Jam satis—ohe!*

To Professor Simon, of Heidelberg, belongs the honor of having suggested and first practised this grand operation, "this great advance which this method of exploration has made within a few years past." The word *advance* is certainly well applied here. The process is an *advance*, but not, in this instance, in the *right* direction. Already it counts a number of victims; and, as it is just beginning to attract attention on this side of the Atlantic, we shall soon hear of cases of laceration of the bowel, of fatal peritonitis, and of permanent paralysis of the sphincter muscles of the anus, occasioned by its reckless employment.

The propitious winds have just wafted to us from the other side of the Atlantic an account of another diabolical procedure. Dr. Bouchard, of France, declares that all organic strictures of the œsophagus should be treated by forced dilatation, in the same manner as strictures of the urethra. For this purpose he uses what he terms his *cornual* sounds, the only inconveniences from the employment of which are, it is asserted, the pain and nausea which they produce! It seems that this illustrious savant has had frequent occasion to use this method, and that he has not failed in a solitary instance in restoring the calibre of the œsophagus to a sufficient width, no matter how narrow, hard, or old the obstruction may have been. We cordially congratulate this accomplished surgeon upon his success. It must be a great consolation to this class of sufferers to know that an effectual mode of treatment has at length been discovered for their relief. May we not hope that ere long some adventurous American surgeon may replace the cornual sound of his French *confrère* with his hand and forearm boldly carried through the stricture into his patient's stomach? We think we already perceive "coming events casting their shadows before them." Would to God that Molière would rise from the dead and assist us in working out these great problems of "advance" in medicine, midwifery, and surgery! "Whither," Mr. Editor, "are we drifting?"

UNGUIS.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, NOVEMBER 13, 1873.

THE PRESIDENT, DR. WILLIAM PEPPER, in the chair.

DR. JAMES TYSON presented a *hydatid cyst* and prepared slides of *echinococci* from the fluid of the cyst and from the germinal membrane lining its interior. The cyst, about one-half inch in diameter, was taken from the anterior border of the right lobe of a *cirrhotic* liver, from the effects of which the patient, a man, aged 32, had died. He had been a drunkard, and was admitted to the Philadelphia Hospital October 4, 1873, with diarrhœa, œdema of the legs, and hydrothorax, but no ascites or jaundice. The limits of the liver's dulness were—in the mammary line, the seventh rib and the free edge of the ribs; in the axillary line, the ninth rib and the free border. Posteriorly, dulness began at the eleventh rib, but the inferior border of the liver could not be determined.

The hydrothorax rapidly increased, and correspondingly dyspnœa. His extremities were always cold, and pulse very feeble. There was no response to remedies, and he gradually grew weaker, dying October 26. Immediately before death dyspnœa was so great from hydrothorax that it was at one time proposed to perform paracentesis thoracis as a palliative; but in his exhausted state it was thought best to omit it. It is likely, however, that his life would have been prolonged some hours at least.

At the *autopsy* fifty-four ounces of fluid were found in the right pleural cavity, and sixteen ounces in the left. The liver, as stated, was cirrhotic, weighing two pounds eleven ounces. The other organs were healthy.

A curious fact was observed with regard to the hydatid cyst. When removed from the body it was perfectly flexible and membranous, and its walls presented the usual microscopic structure,—layers of transparent homogeneous membrane apparently of albuminous composition, and innermost the germinal membrane with millions of the larvæ attached and falling into the fluid contents of the cyst. The latter was placed in alcohol for preservation, and when removed was found to be hard, exceedingly friable, and breaking under the finger like the shell of an egg.

The echinococci, when removed, were perfect spheres with the ring of thirty-four hooklets inverted, and filled, moreover, with what appeared to be granular and globular oil. As the result of osmosis, however, the forms of many had changed, the head being extended and posterior extremity protruded, producing a length of $\frac{1}{75}$ inch, while that of the spheres ranged from $\frac{1}{100}$ to $\frac{1}{150}$ inch. A very marked difference in the appearance of the larva also presented according as the head and row of hooklets were viewed from the front or in profile. In the former instance a mere ring of hooklets

is seen; in the latter a neck-like constriction connects the head or convexity carrying the hooklets with the remainder of the sphere. No cysts were found elsewhere in the abdominal cavity.

Dr. C. B. NANCREDE referred to a degenerated hydatid cyst which he had presented through the late Dr. Mustin in 1870. The nature of the cyst was shown by the presence of hooklets, but there were no echinococci.

Dr. R. M. BERTOLET recalled a specimen of multiple hydatid cyst presented by Dr. J. H. Hutchinson, February 23, 1871. In this case there were several cysts in the liver, and a large cyst was found in the connective tissue of the pelvis.

Dr. MORRIS LONGSTRETH said that the remains of this cyst were still preserved in the Museum of the Pennsylvania Hospital, and that the walls had undergone the same peculiar apparently inorganic change on being placed in alcohol.

Dr. BERTOLET said hydatids were very commonly met abroad, and that one could scarcely attend a pathological lecture in any of the larger cities without seeing one or two specimens upon the table among the accumulated pathology of a couple of days. He recalled an occasion on which Professor Virchow had detected with great glee a cyst on the posterior surface of the larynx, which his assistant had overlooked, and remarked, further, that it was the first hydatid cyst he had met in this situation.

Dr. JOHN H. PACKARD exhibited *a specimen of tumor of the humerus*, removed, by disarticulation of the bone at the shoulder, from a patient in the Episcopal Hospital. W. B., æt. 19, the son of English parents who are living and in good health, had always been perfectly well, and had done very hard work at the "squeezer" in a rolling-mill at Pottsville, until about eighteen months ago, when he strained his right arm, and had in consequence an arthritis of the shoulder. This yielded readily to treatment by Dr. J. T. Carpenter, of Pottsville, and he returned to his work. In June last, however, the upper part of the arm began to swell, and became painful, but not severely so except at times; the pain seemed to run down the arm. As the tumor steadily increased in spite of treatment, Dr. Carpenter sent him down to the Episcopal Hospital. On his admission, October 28, the upper arm was the seat of a tumor nineteen inches in circumference; there were in reality two tumors, one beneath the deltoid, and the other, much smaller, at the inner side of the bone. The skin, although deepened in color by repeated blistering, was sound and non-adherent; a good many veins were seen in it. No pulsation, thrill, or *bruit* could be perceived in the tumors. Motion of the joint, whether passive or active, was perfectly free, except as the bulk of the tumors interfered with it. The man's general condition was good.

On the 3d of November Dr. Packard removed the limb at the shoulder, in the presence of Drs. J. T. Carpenter, W. B. Page, and W. R. Cruice, with the resident staff of the hospital. The operation was rendered quite difficult by the close proximity of the outer tumor to the joint; it was done by Larrey's method, the vessels being tied as they were cut, and the inner flap being formed last, so that he could grasp the vessels in its substance until a ligature was placed on the brachial artery. None of the soft tissues external to the periosteum seemed to be in any degree involved. The subsequent course of the case was satisfactory, the man's recovery being uninterrupted.

On making a section, it was found that the adventitious growths had been formed beneath the periosteum, encroaching somewhat on the shaft-walls of the bone by a sort of cupping of its substance, especially perceptible where the tendon of the deltoid was pushed outwards and downwards into a curve. The substance of the tumors was soft, and so extremely dark as to give at first the impression that they were melanotic; fine spicula of bone radiated outwards through each of them.

A hasty microscopic examination of portions of the adventitious structure, under a magnifying power of about three hundred diameters, disclosed many free nuclei, and nucleated cells of very great variety of shape, but all elongated, and many caudate or bipolar. Unfortunately, the specimen was early placed in a solution of carbolic acid so strong as to destroy its value for further microscopical study.

Except in the age of the patient, and the rapidity with which the new formations progressed, this case corresponds somewhat closely to the descriptions given by various writers of "periosteal sarcoma" or "periosteal osteo-sarcoma."

Pemberton ("Clinical Illustrations of Various Forms of Cancer," p. 74, and Plate III.) gives a case very similar to the one now detailed, but at a more advanced stage, the skin having given way and the tumor having acquired an enormous size.

Bryant ("Practice of Surgery," Am. ed., p. 817) gives a cut of a tumor of the upper part of the tibia, very closely resembling the one in question. He remarks that in proportion to the amount of bony matter entering into the structure of these tumors may they be regarded as innocent, and makes the statement, borne out by the present case, that "the disease is usually seen attacking the ends of the shafts of bones, and not the epiphyses." Wilks ("Pathological Anatomy," p. 35) expresses the same opinion.

Billroth ("Lectures on General Surgical Pathology and Therapeutics," Am. transl. by Hackley, p. 602) says, "Peripheral osteo-sarcomata or periosteal sarcomata (osteoid-chondromata of Virchow) are quite malignant; they either have granulation-structure with osteoid tissue as in osteophyses, and are partly ossified; or they are very large-celled myxo-sarcomata, also partly ossified. The rapidity of their course varies greatly; sarcomata of the lungs have been observed after them."

Gross ("System of Surgery," vol. ii. p. 897) regards these growths as malignant. Erichsen also ("Science and Art of Surgery," Amer. ed., vol. ii. p. 191) speaks of them under the name of "peripheral cancer."

Other writers on surgical pathology speak of these growths, but Dr. P. has found no description more full and accurate than those now referred to.

Dr. J. H. CATHCART presented a specimen of *Fallopian pregnancy, with rupture of the cyst in the third week*. (See Original Communication in current number of the *Times*.)

Dr. JOHN S. PARRY asked how long the lancinating pain had existed in the lower part of the pelvic cavity.

Dr. CATHCART replied that the patient had the pain only on the day she died.

Dr. PARRY said he had asked the question because he considered these periodical pains often of diagnostic value. Physicians have for a long time been unable to diagnosticate with certainty the existence of extra-uterine pregnancies. He thought, however, that there was a series of symptoms which would enable one in the main to predict such a condition. For the space of six or eight weeks after conception there are noted the usual signs of pregnancy, and there are no symptoms of the anomalous condition. After this period, however, the patient will complain of exceedingly severe attacks of pain in the pelvic region, radiating sometimes over the whole abdominal cavity. This is often mistaken for the pain of an uncomplicated cellulitis or pelvic peritonitis, and in a recent case which had come under his observation several physicians of experience had diagnosticated these conditions. This pain is periodical in its occurrence,—every two or four weeks. It is

exceedingly severe, and often produces profound collapse, the patient becoming pulseless, pale, and cold. It is often preceded or accompanied by vaginal hemorrhage in greater or less quantity. The occurrence of these three—1, the usual signs of pregnancy for six or eight weeks; 2, the periodical pain, and 3, the vaginal hemorrhage—ought always to lead the physician to suspect extra-uterine pregnancy. If a deciduous membrane is discharged from the uterus, the diagnosis is certain.

After examining the histories of some two hundred and eighteen cases, he had found the condition was often associated with pelvic peritonitis and malformations about the uterus. In the course of this study he had been surprised to find a large number of cases in which the Fallopian tube entered the cavity of the uterus at some abnormal point, frequently near the cervix instead of the fundus.

In this case the ovum was lodged in the left Fallopian tube, which Dr. P. said was not the most common seat of a tubal pregnancy, it being much more frequent on the right side. The rupture had occurred here much earlier than it usually does, taking place in the majority of cases at the end of the second month. It not unfrequently happens that if it goes beyond this time it reaches nine months, and cases are recorded which have gone beyond full term, the autopsy revealing the fœtus in the Fallopian tube. An undoubted decidua lines the uterus in this case, and this is always the case, though this fact is denied by Robert Lee. The decidua is formed and often thrown off, being mistaken for an abortion. Nor is it always thrown off in mass, but often in pieces so small that it can only be detected by careful microscopical examination of the vaginal discharges.

Dr. PARRY also said the second clot in the specimen presented by Dr. CATHCART was the result of a previous hemorrhage; that twin extra-uterine pregnancies were rare, there being but one on record in this country, in the *New York Medical Repository*, in 1810, and possibly one in France.

On the other hand, combined intra- and extra-uterine pregnancies are not so rare.

Dr. H. LENOX HODGE said there had fallen under his notice but one case of extra-uterine pregnancy. It was of the kind called interstitial. The patient was brought to him from the country. The possibility of a tumor being present had been raised on account of the peculiar shape of the body. He decided that it was a case of extra-uterine pregnancy advanced to seven or eight months. In consultation with his father it was determined to bring on labor and endeavor to save both mother and child. This was done by dilating the os uteri with Barnes's dilators. After the dilatation was accomplished, the tissues of the uterus on the side of the tumor were scratched with a blunt-pointed instrument, and finally gave way, and the membranes ruptured. A child was extracted, which lived about three hours, and the mother completely recovered. The seat of the tumor in that instance was on the right side, at the entrance of the Fallopian tube, but the whole uterine cavity was encroached upon by the presence of the child.

Dr. PARRY said that he had met with the record of a case similar to that reported by Dr. HODGE. The patient was delivered by passing the hand into the cavity of the uterus and rupturing the cyst. Dr. PARRY was not certain whether it was tubal or interstitial, and said that he had not met with the record of twenty cases of interstitial pregnancy,—he recalled but eleven out of two hundred and eighteen. Interstitial pregnancy is also more common on the left side than on the right. In a case reported by Braxton Hicks (Trans. Obstet. Soc. Lond., 1868, p. 57), he said the cyst ruptured spontaneously into the cavity of the uterus during the sixth month. The placenta was not delivered, and the woman perished.

Dr. HODGE asked Dr. PARRY what he considered the essential difference between *interstitial* and *tubal* pregnancy. He had always considered that interstitial in which the product of conception, though still in the Fallopian tube, had been arrested in that portion passing through the uterine walls.

Dr. PARRY replied that there were a number of theories, some authors defining interstitial pregnancy as does Dr. HODGE, while others believe that the fœtus is absolutely developed in the tissue of the uterus, the ovum having entered, when exceedingly small, a crypt which closed over it.

Dr. HORACE WILLIAMS inquired of Dr. HODGE the management of the placenta.

Dr. HODGE replied that it was extracted in the usual manner from the cyst in the walls of the uterus.

The PRESIDENT referred to a specimen of *right tubal pregnancy*, in which the ovum had attained the age of three or four weeks, presented to the Society by Dr. Harris in 1857.

The PRESIDENT also recalled a specimen which he had presented some years ago, in which, during menstruation, a follicle in the ovary had ruptured, and hemorrhage had occurred from the corpus luteum. Acute peritonitis supervened, and proved fatal in forty days.

Dr. TYSON also exhibited the *lungs* of a man who had died of *acute miliary tuberculosis* in his wards at the Philadelphia Hospital. He was 32 years of age, and had been employed in the gas-works of this city. His father died of typhus fever, and his brothers and sisters were in good health, but the cause of his mother's death is unknown. He had himself never been ill, except as to a slight cold last winter.

On admission, October 25, he said he had been sick four weeks. For the first two weeks he complained chiefly of malaise, and at the end of that time had a chill followed by fever, with diarrhœa and some cough, and with these latter symptoms he kept his bed.

When examined after admission, there was a circumscribed red flush on each cheek; his skin was moist; temperature 100° Fahr. There were slight tenderness in the right iliac region, slight diarrhœa, some sore throat, and bronchial cough with expectoration of mucus.

By percussion there was resonance throughout the chest anteriorly and posteriorly, with symmetrical expansion throughout. In auscultation no râles were heard; the respiratory murmur was not enfeebled, being somewhat louder than in health. The increased vocal fremitus and vocal resonance were, however, marked, but, being unaccompanied by any other signs of chest-trouble, this peculiarity was accepted as a physiological exaggeration in this individual.

By the 28th the diarrhœa had ceased, while the cough increased, with expectoration of a "currant-jelly"-like matter. His temperature on this day in the morning was 99° Fahr., in the evening 99⅘° Fahr.

On the 29th the morning temperature was 100⅘° Fahr., with a pulse of 110; in the evening 103° Fahr., with a pulse of 120.

30th.—Temperature 101°, pulse 111; evening, temperature 101°, pulse 100.

31st.—Temperature 100⅘°, pulse 92; evening, temperature 100⅘°, pulse 88.

On November 1 he was weaker, and there was some disturbance of the nervous system, indicated by muttering delirium from which he could be roused, subsultus, jerking of the hands and feet, and dilatation of the pupils. The temperature in the morning was 100⅘°, in the evening 100⅘°.

On the 2d, morning temperature 101°, evening 100⅘°.

On the 3d, fine crepitus was heard throughout the right lung, and there was more of a bronchial element in the breathing, but the physical signs were otherwise unchanged.

By the 5th he was much weaker; crepitus was heard over both lungs, and resonance was slightly impaired below the scapulæ, but there was no dulness.

On the 7th occurred a profuse sweat, with marked reduction of temperature, from 100° in the morning to 97° in the evening. This was repeated the next day, with the same difference in evening and morning temperature, and again on the 9th. The sweating was particularly profuse about the head, and twice on this day, on the evening of which he died, he uttered a sharp cry.

At the post-mortem examination both lungs were found studded with gray granulations about the size of a millet-seed, so closely strewn that not a square inch of lung-tissue escaped. The pleura and bronchi beneath the mucus-membrane were thickly studded with small shining granulations of miliary tubercle. The larynx was not examined. There was a small cavity an inch in diameter in the posterior apicial portion of each lung. They were apparently empty, their walls were thickened and smooth, and they had evidently existed some time. The bronchial glands were enlarged, but not softened.

The *heart* was healthy, but the pericardium contained some small patches of old lymph.

The *peritoneum* and *mesentery* were normal, but there was considerable congestion of the lower part of the *ileum* and upper part of the *colon:* there was no ulceration. The *liver* and *kidneys* were fatty.

On exposing the *brain* there appeared considerable subarachnoid œdema over the cerebrum. Ten ounces of serum were found in the base of the brain and beneath the tentorium, but little in the ventricles. A deposit of miliary tubercle was found upon the upper surface of the cerebrum, the cerebellum, on the pons, and the choroid plexus was studded with tubercle.

Dr. HUTCHINSON referred to a case of acute miliary tuberculosis supervening upon chronic pleurisy, reported by him at length in the *Philadelphia Medical Times* for March 1, 1872. The most noticeable feature of the case was the want of correspondence between the physical signs and general symptoms. Thus, while the patient suffered from extreme dyspnœa, there was only slight dulness upon percussion over the back of the chest, and auscultation revealed nothing more than a diminished intensity of the respiratory sound, together with prolongation of the expiratory murmur, and occasional sibilant and sonorous râles. There was, however, cyanosis of the lips and of the ends of the fingers, showing interference with the circulation through the lungs. The temperature was elevated, but the evening rise was exceedingly slight. Taking this circumstance and the negative signs furnished by the case into consideration, he was able to make a correct diagnosis during the life of the patient.

The PRESIDENT said that in his experience the results of auscultation in these cases had been uncertain and irregular. He had not observed marked suppression of vesicular murmur; but more generally alteration of the murmur, the expiration being prolonged, and the inspiration at times rude, at others hissing, with, at a comparatively early period, the occurrence of diffuse, fine crackling.

DEVELOPMENT OF BACTERIA.—Dr. Oslez, of Canada, claims to have witnessed, under the microscope, the actual development of bacteria from small masses of agglutinated corpuscles. To observe this phenomenon, the blood is mixed with a weak solution (three-fourths per cent.) of common salt, and maintained at the temperature of the body.

GLEANINGS FROM OUR EXCHANGES.

SUICIDES IN FRANCE.—The Paris correspondent of the London *Lancet* extracts from the *Journal Officiel* the following figures: During the year 1871, 4490 acts of suicide were accomplished; 3596 by men, and 894 by females. Out of the above number of cases, 164 individuals had not attained their majority; 1125 were aged from twenty-one to forty; 1782 from forty to sixty; 1362 above sixty; whilst the age of fifty-seven among them was unknown. As to the married or single condition of 4324 of the individuals who had committed suicide, and concerning whom authentic information could be gathered, the following figures are given, and are of great interest: 1410 single people; 1443 married with children; 676 married without children; 484 widows and widowers with children; 311 widows or widowers without children. More than six-tenths (2699) inhabited rural communes with a population of not more than 2000 inhabitants, whilst 1723 inhabited towns. Another interesting item is the mention of the peculiar manner in which death was brought about. Thus, it appears that out of the total number of 4490 cases of suicide, in 1991 it was produced by strangulation; in 1278 by drowning or submersion; in 591 by gunshot wounds; in 215 by asphyxia with coals; in 152 by cutting instruments; in 143 by a wilful fall from heights; 70 by poison; 50 by various other means. As to the supposed motives which led to the committal of suicide, in only 4077 cases was the cause made out. In 1472 cases suicide is attributed to mental disease; in 950 to anguish or pain of various kinds (out of which 535 to physical pain); 651 to bad conduct (out of which 492 to drinking); 620 to family griefs; and 369 to misery. In fifteen cases suicide was committed by the authors of great crimes.

ICTERUS AFTER THE ADMINISTRATION OF HYDRATE OF CHLORAL (Dr. A. Wernich, *Deutsches Archiv für Klin. Med.*).—Reports of cases of icterus following the administration of chloral have already been published both by Dr. Wernich and by other observers; and to these he wishes to add those contained in the present article, in the hope that physicians using this drug may be induced to contribute their observations, and thus aid in the accumulation of sufficient data to afford an explanation of its influence in producing icterus.

Case I.—A woman, the wife of a laborer, æt. 37, had been suffering for a year from indigestion, and at times vomiting, and for twelve weeks from severe pain in the right hypochondrium. For five days previous to her admission into the hospital she had noticed a yellowish color of the skin and conjunctiva, and that her urine was of a dark color. In the epigastric and right hypochondriac regions there could be felt a tumor of firm consistence almost as large as a man's head, which by palpation and percussion was found to be sharply defined from the liver.

During the ensuing two weeks the icteroid hue of the skin was but slight, and the size of the tumor steadily but slowly increased. These symptoms were accompanied by paroxysmal attacks of pain, the severity of which constantly increased, which at first were to some extent relieved by large hypodermic injections of morphia. Later, however, morphia ceased to afford relief, and a trial of chloral was made. The patient passed a quiet night, but in the morning was found in a state of stupor, and the surface of the entire body was of an olive-green color. This continued for two days, accompanied by a mild delirium until the death of the patient, ten days later.

Case II.—A woman, æt. 34, had suffered for three years from want of appetite, vomiting, and a slight de-

gree of jaundice. Paroxysmal attacks of pain came on, the intensity of which steadily increased, and, as morphia failed to give relief, chloral was given, with results similar to those of the first case. The following morning the skin was found deeply jaundiced, the patient was sleepy, and there was some mental disturbance. Death followed the next day.

Case III.—A woman, æt. 40, had mitral insufficiency of high grade, and suffered from results consequent upon that affection. To relieve her from the sufferings due to hydrothorax, after the failure of diuretics resort was had to paracentesis, which afforded temporary relief. The sufferings of the patient during the night being very great, morphia was administered, but with no good effect. Chloral was given and sleep produced. On the following morning the entire body was of an olive-green color, and the patient complained of unpleasant sensations about the head. The jaundice continued until the death of the patient, which occurred about two weeks later. The urine in this case was scanty, and contained albumen, but no biliary coloring-matters. The dose of chloral given in each of these three cases was three grammes.

Dr. Wernich considers that all the suggestions that have been made in explanation of this result of the administration of chloral are unsatisfactory. He concludes also that as yet no rule can be laid down to govern the exhibition of chloral in cases in which hepatic disease exists, for although in the cases narrated the administration of chloral seemed to promote the appearance of the icterus, yet it is often given without injury to those having affection of the liver, either active or latent.

MISCELLANY.

JACOBI'S food for children is prepared as follows: Crack a teaspoonful of barley in a common coffee-mill, then boil it fifteen minutes in a gill of water, adding a pinch of salt. Then strain, and for a young child add one-half as much cow's milk as you have barley-water, and, whilst tepid, nurse from a nursing-bottle. Sweeten lightly with sugar. If the bowels are costive, use oatmeal in place of barley. Keep the bottle clean.

HORSE-MEAT appears to have acquired permanent footing in the popular Austrian bill of fare. According to the *Neue Freie Presse*, the slaughter of horses for food in July last amounted to 203, in August to 184, and in September to 221. In the entire quarter no less than 608 horses were converted into food. The price is not exorbitant. The "fore-quarters" sell at from twelve to fourteen kreutzers per pound, the hind-quarters at from fourteen to sixteen, the ribs and loins from sixteen to eighteen. Fat sells at from eighteen to twenty-six florins the hundred-weight, and bones at one florin and thirty kreutzers.

FATAL POISONING BY COLCHICUM.—Seven persons have died, and five others remain in a precarious condition, in Montreal, poisoned by colchicum. It appears that a man named Flaherty, seeing a sleigh standing on the street without a driver, stole a bottle of what he supposed to be sherry therefrom, but which proved to be wine of colchicum. This he shared with the inmates of the tenement in which he lived, and some neighbors, with the fatal results mentioned.—*The Canadian Medical Journal.*

NOTES AND QUERIES.

BLUE PUS.

CAN some of the readers of the *Times* give me some particulars on the subject of blue pus? A patient of mine with laryngeal chondritis discharged an abscess recently by cough, and among the bloody débris, but distinctly apart from it, were some two or three drachms of thin greenish-blue pus. Dr. Bertolet made a microscopic examination of this pus, and kindly wrote me as follows:

"The *blue pus* contained blood and pus-corpuscles, epithelial scales, and shreds of yellow elastic tissue. No vibriones or fungi are contained in this sputum. Although having a remarkable blue color *en masse*, this was not perceptible under the microscope. By this time the sputum itself has assumed a dark brownish-red color. . . . You will find this subject very well worked up by Lücke in *Archiv f. Klin. Chir.*, Bd. iii. p. 135; also by Zauful, in *Archiv f. Ohrenheilk.*, vol. vi. pp. 206–219, upon 'Blue Pus in Otorrhœa.' The former attributes the blue color to the presence of vibrios, the latter to bacterium termo. Neither were present in this specimen, so that it is at least plausible to suppose that the blue coloration is due to the putrefactive changes acting upon the hæmatin or sulphate of iron."

Dr. Gibb, of London, presented a communication to the British Medical Association, at their late meeting, entitled "Cyanopuon Laryngis," but, from my recollection of the perusal of the published abstract of that paper, I cannot draw any satisfactory conclusion as to the appearance of this pus in my own case.

The one discharge of this peculiar pus has been the only one, though the patient has been expectorating ordinary purulent matter for a month since.

The presence of the blood-corpuscles detected by Dr. Bertolet may be accounted for by the pus having been in the basin in contact with a little blood, expectorated when the abscess ruptured. I am unable to determine the location of the abscess, but am inclined to believe that it is connected with the cricoid cartilage.

Any information on this subject, communicated personally or through the medium of the *Times*, will be greatly appreciated.

J. SOLIS COHEN.

THE next conversational meeting of the Philadelphia County Medical Society will be held at the Hall of the College of Physicians, Wednesday, December 24, 1873, at eight o'clock P.M.

The subject for the evening will be "Tracheotomy in Pseudo-membranous Croup," and the narration of a successful case. To be opened with remarks by Dr. M. O'Hara.

All regular practitioners of medicine in the city are cordially invited to attend.

AT a conversational meeting of the Philadelphia County Medical Society, held December 10, 1873, Dr. J. G. Stetler presented the following resolutions, which were unanimously adopted:

"*Whereas*, It has pleased Providence to remove from our midst Dr. William Mayburry whilst still in the vigor of life and usefulness: therefore, be it

"*Resolved*, That the Philadelphia County Medical Society has heard with unfeigned regret of the demise of our late fellow-member and one of its honored ex-presidents.

"*Resolved*, That in the death of Dr. Mayburry this Society, as well as the profession at large, has lost an active and valuable co-worker: one who has always stood up for the elevation, rights, dignity, and ethical honor of the profession.

"*Resolved*, That we hereby tender our sympathy and condolence to the bereaved and afflicted family for this severe dispensation of Providence.

"*Resolved*, That a copy of the preceding preamble and resolutions be transmitted to the family of the deceased."

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM DECEMBER 16, 1873, TO DECEMBER 22, 1873, INCLUSIVE.

BAILY, E. J., SURGEON.—Granted leave of absence for three months. S. O. 249, A. G. O., December 18, 1873.

CALDWELL, D. G., ASSISTANT-SURGEON.—Assigned to duty at Fort Griffin, Texas. S. O. 222, Department of Texas, December 6, 1873.

CAMPBELL, A. B., ASSISTANT-SURGEON.—To report in person to the Commanding General, Department of Texas, for assignment to duty. S. O. 247, A. G. O., December 13, 1873.

STYER, CHARLES, ASSISTANT-SURGEON.—Leave of absence extended twenty days. S. O. 67, Division of the South, December 16, 1873.